

## CLAIMS

1. A laser processing apparatus for processing a subject to be processed by irradiating the subject with laser light, the apparatus comprising:

5           a laser head for emitting laser light;  
          a cooling jacket for holding and cooling the laser head;  
          an optical system main part for adjusting the laser light emitted from the laser head to a predetermined characteristic; and  
          a regulator, disposed between the cooling jacket and optical  
10          system main part, for adjusting a position and inclination of the cooling jacket with respect to the optical system main part.

2. A laser processing apparatus according to claim 1, wherein the cooling jacket holds and cools a shutter unit for opening and closing an optical path of the laser light emitted from the laser head.

15       3. A laser processing apparatus according to claim 1, wherein the optical system main part comprises:

          a beam expander for adjusting a beam size of the laser light emitted from the laser head;

          a subject observation optical system for observing the subject;  
20          and

          a processing objective lens for converging the laser light onto and within the subject.